

Ernest Shackleton

Ernest Shackleton (1874–1922) was a British explorer who led an expedition to attempt to walk across Antarctica. However, his ship became stuck in sea ice and sank. Shackleton and his men managed to survive for 18 months before making their way to safety.



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Antarctic region

- Antarctic is the world’s fifth-largest continent.
- It is covered in an ice sheet that is 4800m thick.
- It is the coldest, driest, highest and windiest continent on Earth.
- Temperatures can drop to -89 °C, there is little rain or snow and wind speeds can reach 80km per hour!
- It is home to the emperor penguin, humpback whale and leopard seal.



Emerald Knowledge Organiser

Do polar bears eat penguins?

Arctic region

- The Arctic region consists of the Arctic Ocean and the northern parts of Canada, Alaska, Russia, Finland, Sweden, Norway, Greenland and Iceland.
- Winter temperatures can reach -50°C and summer temperatures can reach 10°C.
- It is home to the polar bear, Arctic fox, Arctic hare and walrus.



Antarctic Circle	An imaginary circle of latitude that lies 66.5° south of the equator. Everything south of this line is known as the Antarctic.
Arctic Circle	An imaginary circle of latitude that lies 66.5° north of the equator. Everything north of this line is known as the Arctic.
Climate	The usual weather conditions that occur in a place over a long period.
Polar day	Near constant daylight in the Arctic or Antarctic during the summer months when the Sun does not set below the horizon. Also known as Midnight Sun.
Polar night	Near constant darkness in the Arctic or Antarctic during the winter months when the Sun does not rise above the horizon.
tundra	An area of land where it is too cold for trees to grow and the ground below the surface is permanently frozen.

Polar landscapes

Much of the polar regions is covered with snow and ice all year round. Polar landscape features include glaciers, ice fields and icebergs.

Glacier

Glaciers are slow-moving masses of flowing ice, formed by the compaction of snow. They can vary in depth from 50m to 1500m.



Ice field

Ice fields are large areas of connected glaciers covering flat areas, such as valleys and high plateaus. They are made from compressed and frozen snow.



Iceberg

Icebergs are chunks of ice that calve, or break off, from glaciers and ice sheets and float in the sea. Wind and water erode icebergs into sculptural shapes.



The polar regions

The Earth has two polar regions: the Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. Polar regions have long, cold winters and temperatures mostly below freezing. The weather can be very windy with little precipitation.

